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WHAT IS CLAIMED IS:

1. A septum penetrable by a member and which maintains a seal following member penetration in an axial direction and withdrawal, comprising:

a first layer of resilient material having first and second opposed surfaces; and

a second layer extending across the first surface of the first layer and which is in radial tension.

2. A septum according to claim 1 additionally comprising a third layer extending across the second surface of the first layer, which third layer is in radial tension.

3. A septum according to claim 2 wherein the second and third layers are continuous.

4. A septum according to claim 2 wherein each of the second and third layers are under a tension of between 10^2 to 10^6 newton/m^2.

5. A septum according to claim 2 wherein each of the second and third layers comprise a resilient material.

6. A septum according to claim 5 wherein each of the first, second and third layers comprise a resilient polymer.

7. A septum according to claim 5 wherein each of the first, second and third layers has a thickness of less 10 mm.

8. A septum according to claim 2 wherein the first layer is held in compression by the second and third layers.

9. A septum according to claim 8 wherein the first layer is held in a compression of between 5 to 1000 newton/m.

10. A septum assembly comprising a rigid periphery defining an opening, and a septum of claim 1 extended across, and supported by, the periphery.

11. A septum assembly comprising a rigid periphery defining an opening, and a septum assembly of claim 2 extended across, and supported by, the periphery.

12. A septum assembly of claim 11 wherein the opening has an area of 0.001 to 100 cm^2.

13. A septum assembly of claim 11 wherein the opening has an area of 0.01 cm^2 to 50 cm^2.

14. A method of fabricating a septum comprising applying radial tension to a second layer and bonding the second layer to a first layer of resilient material, wherein the septum maintains a seal following penetration by a member in an axial direction and withdrawal.

15. A method according to claim 14 wherein the second layer is a resilient material.

16. A method of fabricating a septum comprising applying radial tension to a second layer and a third layer and bonding the second and third layers to opposite surfaces of a first layer of resilient material such that the bonded second and third layers are under tension, wherein the septum maintains a seal following penetration by a member in an axial direction and withdrawal.

17. A method according to claim 16 wherein the tension is applied to the second and third layers prior to and during bonding to the first layer.

18. A method according to claim 17 wherein the tension is applied by pulling on the second and third layers.

19. A method according to claim 16 wherein the tension is applied to the second and third layers by chemical or thermal shrinkage after bonding to the first layer.

20. A method according to claim 16 wherein after bonding to the first layer, each of the second and third layers are under a tension of between 5 to 1000 newton/m.

21. A method according to claim 20 wherein each of the second and third layers comprise a resilient material.

22. A method according to claim 21 wherein each of the first, second and third layers comprise a resilient polymer.

23. A method according to claim 21 wherein each of the first, second and third layers has a thickness of less than 10 mm.

24. A method according to claim 16 wherein after bonding to the second and third layers [illegible] second and third layers.

25. A method according to claim 8 wherein the first layer is held in a compression of between 5 to 1000 newton/m.

26. A method according to claim 24 wherein the compression is applied to the first layer after bonding to the second and third layers, by chemical or thermal expansion of the third layer.